

**In the Claims:**

**Claim 1** (original)      A method of operation of a stack for electric power generation made up of at least one membrane fuel cell, comprising feeding non-humidified air at the cathode inlet with stoichiometric factor higher than 1 and temperature not higher than 35°C and discharging exhaust air at the cathode outlet.

**Claim 2** (original)      The method of Claim 1 wherein the temperature of said non-humidified cathode air feed is comprised between 23 and 27°C.

**Claim 3** (currently amended)      The method of ~~anyone of the previous~~ Claims 1 wherein said non-humidified cathode air feed is obtained by cooling ambient air.

**Claim 4** (original)      The method of Claim 3 wherein said ambient air has an initial temperature not higher than 45°C.

**Claim 5** (currently amended)      The method of ~~anyone of the previous~~ Claims 1 further comprising a temperature control of said cathode exhaust air discharge as a function of the pressure of said non-humidified cathode air feed.

**Claim 6** (original)      The method of Claim 5 wherein said control is effected by a coolant maintaining said temperature of said cathode air discharge comprised between 60 and 70°C with said non-humidified cathode air feed having a pressure

comprised between 1 and 1.5 bar absolute and a stoichiometric factor comprised between 1.2 and 3.

**Claim 7** (currently amended)      The method of ~~anyone of claims from Claim 3 to 6~~ wherein said ambient air cooling is obtained by means of a device which carries out a compression, a subsequent thermal exchange in a heat exchanger and a final expansion.

**Claim 8** (original)      The method of Claim 7 wherein said thermal exchange utilises ambient air as the coolant.

**Claim 9** (currently amended)      The method of Claim 7 ~~or 8~~ wherein said compression is effected up to a final pressure comprised between 1.1 ~~e~~ and 1.5 bar absolute.

**Claim 10** (currently amended)      The method of ~~anyone of claims from 7 to 9~~ wherein said final expansion supplies air at a pressure comprised between 1 and 1.1 bar absolute.

**Claim 11** (currently amended)      The method of ~~anyone of claims from 7 to 10~~ wherein said thermal exchange cools said compressed air from a temperature lower than 80°C to a temperature comprised between 47 and 53°C.

**Claim 12** (currently amended)      The method of ~~anyone of claims from 7 to~~  
~~11~~ wherein said expansion produces mechanical work reused in said compression.

**Claim 13** (currently amended)      The method of ~~anyone of claims from 7 to~~  
~~12~~ wherein said device has an overall energy consumption not higher than 8% of the  
electric power generated by said stack.

**Claim 14** (original)      A fuel cell system comprising at least one fuel cell  
stack for electric power generation cathodically fed with air coming from a conditioning  
device comprising at least one fan or compressor, at least one heat exchanger and at least  
one expander.

**Claim 15** (original)      The system of Claim 14 wherein said cathode air feed  
of said stack has a stoichiometric factor comprised between 1.2 and 3.

**Claim 16** (currently amended)      The system of Claim 14 ~~or 15~~ wherein said at  
least one expander is a rotating expander.

**Claim 17** (currently amended)      The system of ~~anyone of claims from 14 to~~  
~~16~~ wherein said expander has a delivery temperature comprised between 23 and 27°C  
and a delivery pressure comprised between 1 and 1.1 bar absolute.

**Claim 18** (currently amended)      The system of ~~anyone of claims from 14 to 17~~ wherein said conditioning device supplies said fan or compressor reusing the mechanical work produced by said expander.

**Claim 19** (currently amended)      The system of ~~anyone of claims from 14 to 18~~ wherein said heat exchanger is suited to achieve the cooling of air coming from said fan or compressor by heat exchange with ambient air.

**Claim 20** (currently amended)      The system of ~~anyone of claims from 14 to 19~~ wherein said heat exchanger has a delivery temperature comprised between 47 and 53°C.

**Claim 21** (currently amended)      The system of ~~anyone of claims from 14 to 20~~ wherein said fan has a delivery pressure comprised between 1.0 and 1.5 bar absolute.

**Claim 22** (currently amended)      The system of ~~anyone of claims from 14 to 21~~ wherein said conditioning device has an energy consumption not higher than 8% of the electric power generated by said stack.